# Rodolphe Sonnier

List of Publications by Year
in descending order



| 112 | 2,781 | 186265 | 233421 |
|---|---|---|---|
| papers | citations | 28 h-index | 45 g-index |

| 113 | 113 | 113 | 2418 |
|---|---|---|---|
| all docs | docs citations | times ranked | citing authors |

| # | Article | IF | Citations |
|---|---|---|---|
| 1 | Ignition and Charring of PVC-Based Electric Cables. Fire Technology, 2022, 58, 689-707. | 3.0 | 5 |
| 2 | Flame retardancy of flax fibers by pre-irradiation grafting of a phosphonate monomer. Industrial Crops and Products, 2022, 176, 114334. | 5.2 | 7 |
| 3 | Novel Foaming-Agent Free Insulating Geopolymer Based on Industrial Fly Ash and Rice Husk. Molecules, 2022, 27, 531. | 3.8 | 6 |
| 4 | Microscale forced combustion: Pyrolysis-combustion flow calorimetry (PCFC). , 2022, , 91-116. | | 1 |
| 5 | Correlation between laboratory- and real-scale fire analyses. , 2022, , 333-379. | | 1 |
| 6 | Layer-by-layer polymer deposited fabrics with superior flame retardancy and electrical conductivity. Reactive and Functional Polymers, 2022, 173, 105221. | 4.1 | 13 |
| 7 | Fire behaviour of hemp, clay and gypsum-based light biobased concretes and renders. Construction and Building Materials, 2022, 331, 127230. | 7.2 | 6 |
| 8 | Synthesis of reactive phosphorus-based carbonate for flame retardant polyhydroxyurethane foams. Polymer Degradation and Stability, 2022, 202, 110031. | 5.8 | 14 |
| 9 | Renewable phosphorous-based flame retardant for lignocellulosic fibers. Industrial Crops and Products, 2022, 186, 115265. | 5.2 | 19 |
| 10 | Fire Behavior of Thermally Thin Materials in Cone Calorimeter. Polymers, 2021, 13, 1297. | 4.5 | 17 |
| 11 | Synthesis of new ionic liquid-grafted metal-oxo nanoclusters â€“ Design of nanostructured hybrid organic-inorganic polymer networks. Polymer, 2021, 224, 123721. | 3.8 | 9 |
| 12 | Fire behavior of lead-containing PMMA based Kyowaglas. Polymer Degradation and Stability, 2021, 190, 109618. | 5.8 | 4 |
| 13 | Influence of Density on Foam Collapse under Burning. Polymers, 2021, 13, 13. | 4.5 | 6 |
| 14 | A method to quantitatively assess the modes-of-action of flame-retardants. Polymer Degradation and Stability, 2021, 195, 109767. | 5.8 | 5 |
| 15 | Assessment of olive pomace wastes as flame retardants. Journal of Applied Polymer Science, 2020, 137, 47715. | 2.6 | 1 |
| 16 | Flame retardancy of wood-plastic composites by radiation-curing phosphorus-containing resins. Radiation Physics and Chemistry, 2020, 170, 108547. | 2.8 | 5 |
| 17 | Fire behavior of innovative alginate foams. Carbohydrate Polymers, 2020, 250, 116910. | 10.2 | 14 |
| 18 | Suitability and Modification of Different Renewable Materials as Feedstock for Sustainable Flame Retardants. Molecules, 2020, 25, 5122. | 3.8 | 13 |

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| 19 | Controlling interfacial interactions in LDPE/flax fibre biocomposites by a combined chemical and radiation-induced grafting approach. Cellulose, 2020, 27, 6333-6351. | 4.9 | 5 |
| 20 | Halloysite nanotubes (HNTs)/polymer nanocomposites: thermal degradation and flame retardancy. , 2020, , 67-93. | | 13 |
| 21 | Assessment of the protective effect of PMMA on water immersion ageing of flame retarded PLA/PMMA blends. Polymer Degradation and Stability, 2020, 174, 109104. | 5.8 | 10 |
| 22 | Toward the cottonization of hemp fibers by steam explosion. Flame-retardant fibers. Industrial Crops and Products, 2020, 151, 112242. | 5.2 | 20 |
| 23 | Influence of lignocellulosic substrate and phosphorus flame retardant type on grafting yield and flame retardancy. Reactive and Functional Polymers, 2020, 153, 104612. | 4.1 | 12 |
| 24 | Flame Retardant-Functionalized Cotton Cellulose Using Phosphonate-Based Ionic Liquids. Molecules, 2020, 25, 1629. | 3.8 | 14 |
| 25 | Flame Retardancy of Wood Fiber Materials Using Phosphorus-Modified Wheat Starch. Molecules, 2020, 25, 335. | 3.8 | 26 |
| 26 | Influence of different parameters in the fire behaviour of seven hardwood species. Fire Safety Journal, 2019, 107, 193-201. | 3.1 | 17 |
| 27 | New Reactive Isoeugenol Based Phosphate Flame Retardant: Toward Green Epoxy Resins. ACS Sustainable Chemistry and Engineering, 2019, 7, 14074-14088. | 6.7 | 72 |
| 28 | Exploring the Contribution of Two Phosphorus-Based Groups to Polymer Flammability via Pyrolysisâ€“Combustion Flow Calorimetry. Materials, 2019, 12, 2961. | 2.9 | 8 |
| 29 | Influence of monomer reactivity on radiation grafting of phosphorus flame retardants on flax fabrics. Polymer Degradation and Stability, 2019, 166, 86-98. | 5.8 | 13 |
| 30 | Study of gases released under incomplete combustion using PCFCâ€“FTIR. Journal of Thermal Analysis and Calorimetry, 2019, 138, 753-763. | 3.6 | 5 |
| 31 | Cardanol and Eugenol Based Flame Retardant Epoxy Monomers for Thermostable Networks. Molecules, 2019, 24, 1818. | 3.8 | 71 |
| 32 | Chemical treatments of flax fibers â€“ Control of the diffusion of molecules into the fiber structure. Industrial Crops and Products, 2019, 132, 430-439. | 5.2 | 8 |
| 33 | Tripleâ€faced polypropylene: Fire retardant, thermally stable, and antioxidative. Journal of Vinyl and Additive Technology, 2019, 25, 366-376. | 3.4 | 13 |
| 34 | Influence of Ammonium Polyphosphate/Lignin Ratio on Thermal and Fire Behavior of Biobased Thermoplastic: The Case of Polyamide 11. Materials, 2019, 12, 1146. | 2.9 | 24 |
| 35 | New Insights into the Investigation of Smoke Production Using a Cone Calorimeter. Fire Technology, 2019, 55, 853-873. | 3.0 | 19 |
| 36 | Interactions between kaolinite and phosphinate-based flame retardant in Polyamide 6. Applied Clay Science, 2018, 157, 248-256. | 5.2 | 38 |

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| 37 | Effect of post curing temperature on mechanical properties of a flax fiber reinforced epoxy composite. Composites Part A: Applied Science and Manufacturing, 2018, 107, 171-179. | 7.6 | 78 |
| 38 | Influence of grammage on heat release rate of polypropylene fabrics. Journal of Fire Sciences, 2018, 36, 30-46. | 2.0 | 11 |
| 39 | New alginate foams: Boxâ€Behnken design of their manufacturing; fire retardant and thermal insulating properties. Journal of Applied Polymer Science, 2018, 135, 45868. | 2.6 | 16 |
| 40 | Flame Retardant Biobased Polymers. Springer Briefs in Molecular Science, 2018, , 1-32. | 0.1 | 2 |
| 41 | Biobased Flame Retardants. Springer Briefs in Molecular Science, 2018, , 33-72. | 0.1 | 7 |
| 42 | Flame Retardancy of Natural Fibers Reinforced Composites. Springer Briefs in Molecular Science, 2018, , 73-98. | 0.1 | 4 |
| 43 | Towards Bio-based Flame Retardant Polymers. Springer Briefs in Molecular Science, 2018, , . | 0.1 | 28 |
| 44 | Radiation-grafting of flame retardants on flax fabrics â€“ A comparison between different flame retardant structures. Radiation Physics and Chemistry, 2018, 145, 135-142. | 2.8 | 14 |
| 45 | Grafting of phosphorus flame retardants on flax fabrics: Comparison between two routes. Polymer Degradation and Stability, 2018, 147, 25-34. | 5.8 | 36 |
| 46 | Fire behavior of halogen-free flame retardant electrical cables with the cone calorimeter. Journal of Hazardous Materials, 2018, 342, 306-316. | 12.4 | 92 |
| 47 | Improving the resistance to hydrothermal ageing of flame-retarded PLA by incorporating miscible PMMA. Polymer Degradation and Stability, 2018, 155, 52-66. | 5.8 | 17 |
| 48 | Radiation-induced modifications in natural fibres and their biocomposites: Opportunities for controlled physico-chemical modification pathways?. Industrial Crops and Products, 2017, 109, 199-213. | 5.2 | 38 |
| 49 | Novel nanocomposites based on poly(ethylene- co -vinyl acetate) for coating applications: The complementary actions of hydroxyapatite, MWCNTs and ammonium polyphosphate on flame retardancy. Progress in Organic Coatings, 2017, 113, 207-217. | 3.9 | 31 |
| 50 | Prediction of thermosets flammability using a model based on group contributions. Polymer, 2017, 127, 203-213. | 3.8 | 31 |
| 51 | Effect of phosphorous-modified silica on the flame retardancy of polybutylene terephthalate based nanocomposites. Polymer Degradation and Stability, 2017, 143, 74-84. | 5.8 | 9 |
| 52 | Competitiveness and synergy between three flame retardants in poly(ethylene- co -vinyl acetate). Polymer Degradation and Stability, 2017, 143, 164-175. | 5.8 | 27 |
| 53 | Thermal degradation and flammability of polyamide 11 filled with nanoboehmite. Journal of Thermal Analysis and Calorimetry, 2017, 129, 1029-1037. | 3.6 | 14 |
| 54 | An Insight into the Flammability of Some Bio-Based Polyesters. Polymers, 2017, 9, 706. | 4.5 | 2 |

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| 55 | Selective dispersion of nanoplatelets of MDH in a HDPE/PBT binary blend: Effect on flame retardancy. Polymer Degradation and Stability, 2016, 126, 107-116. | 5.8 | 5 |
| 56 | Water-based flame retardant coating using nano-boehmite for expanded polystyrene (EPS) foam. Progress in Organic Coatings, 2016, 99, 32-46. | 3.9 | 29 |
| 57 | Fire retardancy of polypropylene/kaolinite composites. Polymer Degradation and Stability, 2016, 129, 260-267. | 5.8 | 26 |
| 58 | A method to study the two-step decomposition of binary blends in cone calorimeter. Combustion and Flame, 2016, 169, 1-10. | 5.2 | 16 |
| 59 | Fire retardant benefits of combining aluminum hydroxide and silica in ethylene-vinyl acetate copolymer (EVA). Polymer Degradation and Stability, 2016, 128, 228-236. | 5.8 | 42 |
| 60 | Fire retardancy of ethylene-vinyl acetate composites â€“ Evaluation of synergistic effects between ATH and diatomite fillers. Polymer Degradation and Stability, 2016, 129, 246-259. | 5.8 | 26 |
| 61 | Self-extinguishing bio-based polyamides. Polymer Degradation and Stability, 2016, 134, 10-18. | 5.8 | 23 |
| 62 | Elaboration of light composite materials based on alginate and algal biomass for flame retardancy: preliminary tests. Journal of Materials Science, 2016, 51, 10035-10047. | 3.7 | 10 |
| 63 | Studying the thermo-oxidative stability of chars using pyrolysis-combustion flow calorimetry. Polymer Degradation and Stability, 2016, 134, 340-348. | 5.8 | 8 |
| 64 | Flame retardancy of phosphorus-containing ionic liquid based epoxy networks. Polymer Degradation and Stability, 2016, 134, 186-193. | 5.8 | 67 |
| 65 | Thermal degradation of polyesters filled with magnesium dihydroxide and magnesium oxide. Fire and Materials, 2016, 40, 445-463. | 2.0 | 9 |
| 66 | Predicting the flammability of polymers from their chemical structure: An improved model based on group contributions. Polymer, 2016, 86, 42-55. | 3.8 | 26 |
| 67 | Janus hybrid silica/polymer nanoparticles as effective compatibilizing agents for polystyrene/polyamide-6 melted blends. Polymer, 2016, 90, 34-44. | 3.8 | 61 |
| 68 | Controlled Emissivity Coatings to Delay Ignition of Polyethylene. Materials, 2015, 8, 6935-6949. | 2.9 | 13 |
| 69 | Influence of organophosphorous silica precursor on the thermal and fire behaviour of a PA66/PA6 copolymer. Polymer Degradation and Stability, 2015, 115, 117-128. | 5.8 | 15 |
| 70 | Improving the flame retardancy of flax fabrics by radiation grafting of phosphorus compounds. European Polymer Journal, 2015, 68, 313-325. | 5.4 | 54 |
| 71 | Influence of multiwall carbon nanotube (MWCNT) dispersion on ignition of poly(dimethylsiloxane)â€“MWCNT composites. Polymers for Advanced Technologies, 2015, 26, 277-286. | 3.2 | 17 |
| 72 | Influence of radiation-crosslinking on flame retarded polymer materialsâ€”How crosslinking disrupts the barrier effect. Radiation Physics and Chemistry, 2015, 106, 278-288. | 2.8 | 12 |

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| 73 | Effect of phosphorous-modified silica on the flame retardancy of polypropylene based nanocomposites. Polymer Degradation and Stability, 2015, 119, 260-274. | 5.8 | 24 |
| 74 | Dynamic rheological studies and applicability of timeâ€“temperature superposition principle for PA12/SEBS-g-MA blends. Polymer Bulletin, 2015, 72, 3305-3324. | 3.3 | 17 |
| 75 | Ethylene-vinyl acetate copolymer/aluminium trihydroxide composites: A new method to predict the barrier effect during cone calorimeter tests. Polymer Degradation and Stability, 2015, 120, 23-31. | 5.8 | 15 |
| 76 | Is expanded graphite acting as flame retardant in epoxy resin?. Polymer Degradation and Stability, 2015, 117, 22-29. | 5.8 | 40 |
| 77 | Synthesis of a new organophosphorous alkoxysilane precursor and its effect on the thermal and fire behavior of a PA66/PA6 copolymer. European Polymer Journal, 2015, 66, 352-366. | 5.4 | 33 |
| 78 | The influence of dispersion and distribution of ultrafine kaolinite in polyamide-6 on the mechanical properties and fire retardancy. Applied Clay Science, 2015, 116-117, 8-15. | 5.2 | 16 |
| 79 | Non-isothermal crystallization kinetics and thermal behaviour of PA12/SEBS-g-MA blends. Bulletin of Materials Science, 2015, 38, 1315-1327. | 1.7 | 10 |
| 80 | From a bio-based phosphorus-containing epoxy monomer to fully bio-based flame-retardant thermosets. RSC Advances, 2015, 5, 70856-70867. | 3.6 | 87 |
| 81 | Synthesis of biobased phosphorus-containing flame retardants for epoxy thermosets comparison of additive and reactive approaches. Polymer Degradation and Stability, 2015, 120, 300-312. | 5.8 | 45 |
| 82 | Effects of ageing on the fire behaviour of flame-retarded polymers: a review. Polymer International, 2015, 64, 313-328. | 3.1 | 59 |
| 83 | Incorporation of elastomer into poly(ether ether ketone): an attempt to improve the damping factor. High Performance Polymers, 2014, 26, 986-996. | 1.8 | 11 |
| 84 | Synthesis of biobased phosphate flame retardants. Pure and Applied Chemistry, 2014, 86, 1637-1650. | 1.9 | 22 |
| 85 | CHAPTER 12. Flame Retardancy of Phosphorus-Containing Polymers. RSC Polymer Chemistry Series, 2014, , 252-270. | 0.2 | 10 |
| 86 | Influence of carbon nanotubes on fire behaviour and aerosol emitted during combustion of thermoplastics. Fire and Materials, 2014, 38, 46-62. | 2.0 | 17 |
| 87 | Fire retardancy of ethylene vinyl acetate/ultrafine kaolinite composites. Polymer Degradation and Stability, 2014, 100, 54-62. | 5.8 | 40 |
| 88 | Effect of cellulose, hemicellulose and lignin contents on pyrolysis and combustion of natural fibers. Journal of Analytical and Applied Pyrolysis, 2014, 107, 323-331. | 5.5 | 273 |
| 89 | Influence of microstructure and flexibility of maleated styrene-b-(ethylene-co-butylene)-b-styrene rubber on the mechanical properties of polyamide 12. Polymer Bulletin, 2014, 71, 1131-1152. | 3.3 | 11 |
| 90 | Incorporation of modified StÃ¶ber silica nanoparticles in polystyrene/polyamide-6 blends: Coalescence inhibition and modification of the thermal degradation via controlled dispersion at the interface. Polymer, 2014, 55, 2704-2715. | 3.8 | 36 |

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| 91 | Flame retardancy of ethylene vinyl acetate (EVA) using new aluminum-based fillers. Polymer Degradation and Stability, 2014, 108, 56-67. | 5.8 | 35 |
| 92 | Synthesis of new flame-retardants by radical chain transfer copolymerization of glycidyl methacrylate and dimethoxy-phosphorylmethyl methacrylate. European Polymer Journal, 2014, 57, 109-120. | 5.4 | 21 |
| 93 | FTIRâ€"PCFC coupling: A new method for studying the combustion of polymers. Combustion and Flame, 2014, 161, 1398-1407. | 5.2 | 19 |
| 94 | Efficiency of wollastonite and ammonium polyphosphate combinations on flame retardancy of polystyrene. Polymers for Advanced Technologies, 2013, 24, 104-113. | 3.2 | 12 |
| 95 | Calcium and aluminum-based fillers as flame-retardant additives inÂsilicone matrices. III. Investigations on fire reaction. Polymer Degradation and Stability, 2013, 98, 2021-2032. | 5.8 | 29 |
| 96 | Study of the combustion efficiency of polymers using a pyrolysisâ€"combustion flow calorimeter. Combustion and Flame, 2013, 160, 2182-2193. | 5.2 | 39 |
| 97 | Polycarbonate nanocomposite with improved fire behavior, physical and psychophysical transparency. European Polymer Journal, 2013, 49, 319-327. | 5.4 | 30 |
| 98 | Nanocomposites of polypropylene/polyamide 6 blends based on three different nanoclays: thermal stability and flame retardancy. Polimery, 2013, 58, 350-360. | 0.7 | 16 |
| 99 | Pyrolysis-Combustion Flow Calorimetry: A Powerful Tool To Evaluate the Flame Retardancy of Polymers. ACS Symposium Series, 2012, , 361-390. | 0.5 | 21 |
| 100 | Influence of a treated kaolinite on the thermal degradation and flame retardancy of poly(methyl) Tj ETQq0 0 0 rgBT /Overlock 10 Tf 50 3 | 5.2 | 19 |
| 101 | Investigation of fire-resistance mechanisms of the ternary system (APP/MPP/TiO2) in PMMA. Polymer Degradation and Stability, 2012, 97, 2154-2161. | 5.8 | 28 |
| 102 | Comparison of alumina and boehmite in (APP/MPP/metal oxide) ternary systems on the thermal and fire behavior of PMMA. Polymers for Advanced Technologies, 2012, 23, 1369-1380. | 3.2 | 16 |
| 103 | Barrier effect of flame retardant systems in poly(methyl methacrylate): Study of the efficiency of the surface treatment by octylsilane of silica nanoparticles in combination with phosphorous fire retardant additives. Fire and Materials, 2012, 36, 590-602. | 2.0 | 16 |
| 104 | Influence of the morphology on the fire behavior of a polycarbonate/poly(butylene terephthalate) blend. Journal of Applied Polymer Science, 2012, 125, 3148-3158. | 2.6 | 19 |
| 105 | Theoretical and empirical approaches to understanding the effect of phosphonate groups on the thermal degradation for two chemically modified PMMA. European Polymer Journal, 2012, 48, 604-612. | 5.4 | 28 |
| 106 | Relationships between the molecular structure and the flammability of polymers: Study of phosphonate functions using microscale combustion calorimeter. Polymer, 2012, 53, 1258-1266. | 3.8 | 32 |
| 107 | Synthesis of polyphosphorinanes Part II. Preparation, characterization and thermal properties of novel flame retardants. Polymer Chemistry, 2011, 2, 236-243. | 3.9 | 11 |
| 108 | Effect of magnesium dihydroxide nanoparticles on thermal degradation and flame resistance of PMMA nanocomposites. Polymers for Advanced Technologies, 2011, 22, 1713-1719. | 3.2 | 19 |

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| 109 | Combining cone calorimeter and PCFC to determine the mode of action of flameâ€retardant additives. Polymers for Advanced Technologies, 2011, 22, 1091-1099. | 3.2 | 58 |
| 110 | Reactive compatibilization of polymer blends by Î³â€irradiation: Influence of the order of processing steps. Journal of Applied Polymer Science, 2010, 115, 1710-1717. | 2.6 | 20 |
| 111 | Compatibilizing thermoplastic/ground tyre rubber powder blends: Efficiency and limits. Polymer Testing, 2008, 27, 901-907. | 4.8 | 73 |
| 112 | Incorporation of Organomodified Layered Silicates and Silica in Thermoplastic Elastomers in Order to Improve Tear Strength. Materials Science Forum, 0, 714, 217-227. | 0.3 | 3 |